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AMENDMENTS TO THE CLAIMS

1. (Previously presented) A therapeutic apparatus for a patient comprising:
 - a support frame including a first body supporting portion and a second body supporting portion, the first body supporting portion moveable relative to the second body supporting portion along a longitudinal axis;
 - a first actuator adapted to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis;
 - a securing system adapted to secure a patient to the first and second body supporting portions; and
 - a linkage mechanism adapted to move the first body supporting portion along a path relative to the second body portion, the path comprising at least one rotational degree of freedom,
wherein the first actuator is adapted to move the first body supporting portion along the longitudinal axis without interfering with movement of the first body supporting portion along the path comprising at least one rotational degree of freedom.
2. (Original) The therapeutic apparatus of claim 1 wherein the at least one rotational degree of freedom comprises two rotational degrees of freedom.
3. (Original) The therapeutic apparatus of claim 1 wherein the at least one rotational degree of freedom comprises three rotational degrees of freedom.
4. (Original) The therapeutic apparatus of claim 1 wherein the linkage mechanism is adapted to move the first body supporting portion along the path comprising at least one rotational degree of freedom simultaneously with movement of the first body supporting portion relative to the second body supporting portion along the longitudinal axis.

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5. (Original) The therapeutic apparatus of claim 1 wherein the securing system comprises a first belt attachable to the first body supporting portion and adapted to secure the patient to the first body supporting portion and a second belt attachable to the second body supporting portion and adapted to secure the patient to the second body supporting portion.

6. (cancelled)

7. (Previously presented) The therapeutic apparatus of claim 1 wherein the first actuator comprises a pneumatic actuator.

8. (Previously presented) The therapeutic apparatus of claim 1 wherein the first actuator comprises a double-acting pneumatic cylinder.

9. (Previously presented) The therapeutic apparatus of claim 1 comprising a source of compressed air adapted to actuate the first actuator.

10. (Previously presented) The therapeutic apparatus of claim I comprising a second actuator adapted to move the first body supporting portion along at least one rotational degree of freedom.

11. (Original) The therapeutic apparatus of claim 10 wherein the rotational degree of freedom comprises pitch movement.

12. (Previously presented) The therapeutic apparatus of claim 1 comprising:
a second actuator adapted to displace a portion of the therapeutic apparatus;
and
a single power source connected to the first and second actuators.

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13. (Previously presented) The therapeutic apparatus of claim 1 comprising:

a second actuator adapted to move a head supporting portion of a cervical traction device relative to the first body supporting portion; and
a single power source connected to the first and second actuators.

14. (Original) The therapeutic apparatus of claim 1 comprising:
a head supporting portion moveable relative to the second body supporting portion; and

a pair of neck wedges adapted to retain a patient's head to the head supporting portion.

15. (Original) The therapeutic apparatus of claim 1 comprising at least one locking mechanism adapted to releasably retain the first body supporting portion in a plurality of locations along the path relative to the second body supporting portion.

16. (Original) The therapeutic apparatus of claim 15 wherein the at least one locking mechanism is continuously adjustable.

17. (Original) The therapeutic apparatus of claim 15 comprising at least one locking mechanism for each rotational degree of freedom.

18. (Original) The therapeutic apparatus of claim 1 comprising a sliding mechanism supporting the first body supporting portion.

19. (Original) The therapeutic apparatus of claim 1 wherein the linking mechanism comprises a roll mechanism.

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20. (Original) The therapeutic apparatus of claim 1 wherein the linking mechanism comprises a pitch mechanism.

21. (Original) The therapeutic apparatus of claim 1 wherein the linking mechanism comprises a yaw mechanism.

22. (Original) The therapeutic apparatus of claim 1 wherein the linking mechanism comprises a cantilever structure pivotally attached to the support frame.

23. (Original) The therapeutic apparatus of claim 1 wherein the support frame includes a first adjustable member adapted to adjust the height of the first and second body supporting portions.

24. (Original) The therapeutic apparatus of claim 1 comprising a cervical traction member.

25. (Original) The therapeutic apparatus of claim 1 comprising a processor adapted to communicate with the apparatus.

26. (Original) The therapeutic apparatus of claim 1 comprising a processor adapted to retain a plurality of traction protocols.

27. (Original) The therapeutic apparatus of claim 1 comprising a processor adapted to retain a plurality of cervical and lumbar traction protocols.

28. (Previously presented) A method of treating back pain in a patient comprising the steps of:

providing a therapeutic apparatus having a support frame with a first body supporting portion, a second body supporting portion, and a first actuator adapted to move

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the first body supporting portion relative to the second body supporting portion along a longitudinal axis;

supporting the patient along the first body supporting portion and the second body supporting portion;

securing the patient to the apparatus with a securing system;

moving the first body supporting portion along a path relative to the second body supporting portion, the path comprising at least one rotational degree of freedom; and

activating the actuator to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis to affect the distance between the first body supporting portion and the second body supporting portion without interfering with the step of moving the first body supporting portion along the path comprising at least one rotational degree of freedom.

29. (Original) The method of claim 28 wherein the step of moving the first body supporting portion along a path comprising at least one rotational degree of freedom occurs simultaneously with moving the first body supporting portion along the longitudinal axis.

30. (Original) The method of claim 28 wherein the step of moving the first body supporting portion along a path comprising at least one rotational degree of freedom occurs after the first body supporting portion is moved along the longitudinal axis.

31. (Original) The method of claim 28 wherein the step of moving the first body supporting portion along a path comprising at least one rotational degree of freedom occurs before the first body supporting portion is moved along the longitudinal axis.

32. (Previously presented) The method of claim 28 comprising securing the patient to the first body supporting portion with a first belt and securing the patient to the second body supporting portion with a second belt.

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33. (Previously presented) The method of claim 28 comprising releasably retaining the first body supporting portion along one or more locations along the path relative to the second body supporting portion.

34. (Original) The method of claim 28 comprising supporting the patient along the first body supporting portion and second body supporting portion in a prone or supine position.

35. (Original) The method of claim 28 wherein the therapeutic apparatus includes a processor, the method comprising programming one or more treatment protocols into the processor.

36. (Original) The method of claim 28 wherein the therapeutic apparatus includes a processor, the method comprising storing one or more treatment protocols into the processor.

37. (Previously presented) A therapeutic apparatus for a patient comprising:

a support frame including a first body supporting portion and a second body supporting portion, the first body supporting portion moveable relative to the second body supporting portion along a longitudinal axis;

a linking mechanism pivotally securing the first body supporting portion relative to the second body portion such that the first body supporting portion is adapted to move along a path relative to the second body supporting portion, the path comprising at least one rotational degree of freedom comprising pitch movement.

a first actuator adapted to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis;

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a second actuator adapted to move the first body supporting portion relative to the second body supporting portion along the at least one rotational degree of freedom comprising pitch movement; and

a securing system adapted to secure the patient to the first and second body supporting portions.

38. (Previously presented) The apparatus of claim 37 wherein the linking mechanism is adapted to provide pitch movement of the first body portion above a neutral position and below the neutral position.

39. (Previously presented) The apparatus of claim 37 further comprising a processor adapted to move the actuator provide automated pitch movement in response to a programmed pitch value.

40. (Previously presented) A therapeutic apparatus for a patient comprising:

a support frame including a first body supporting portion and a second body supporting portion, the first body supporting portion moveable relative to the second body supporting portion along a longitudinal axis;

a first actuator adapted to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis;

a securing system adapted to secure a patient to the first and second body supporting portions;

a linking mechanism adapted to move the first body supporting portion along a path relative to the second body supporting portion, the path comprising at least one rotational degree of freedom; and

a processor adapted store at least one pre-programmed traction protocol.

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41. (New) The therapeutic apparatus of claim 1 wherein the securing system comprises high friction surface on at least one of the first body supporting portion and the second body supporting portion.

42. (New) The method of claim 28 comprising securing the patient to at least one of the first body supporting portion and the second body supporting portion with a high friction surface.

43. (New) The therapeutic apparatus of claim 37 wherein the securing system comprises high friction surface on at least one of the first body supporting portion and the second body supporting portion.

44. (New) The therapeutic apparatus of claim 40 wherein the securing system comprises high friction surface on at least one of the first body supporting portion and the second body supporting portion.

45. (New) The therapeutic apparatus of claim 1 wherein the first actuator comprises one of a hydraulic actuator, a rack and pinion structure, a worm gear, or a solenoid.

46. (New) The therapeutic apparatus of claim 1 comprising a traction device that isolates and concentrates a traction force on a specific area of the patient's body.

47. (New) The therapeutic apparatus of claim 1 adapted to exert a therapeutic traction force on a patient's spine to relieve pressures.

48. (New) The therapeutic apparatus of claim 1 capable of producing forces and positions required to cause decompression of intervertebral discs.

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49. (New) The therapeutic apparatus of claim 1 capable of producing unloading due to distraction and positioning.

50. (New) The therapeutic apparatus of claim 1 capable of treating back pain, neck pain, herniated discs, protruding discs, degenerative disc disease, posterior facet syndrome and sciatica.

51. (New) The method of claim 28 comprising the step of isolating and concentrating a traction force on a specific area of the patient's body.

52. (New) The method of claim 28 comprising the step of exerting a therapeutic traction force on a patient's spine to relieve pressure.

53. (New) The method of claim 28 comprising the step of producing forces and positions required to cause decompression of intervertebral discs.

54. (New) The method of claim 28 comprising the step of producing unloading due to distraction and positioning.

55. (New) The method of claim 28 comprising the step of treating back pain, neck pain, herniated discs, protruding discs, degenerative disc disease, posterior facet syndrome and sciatica.

56. (New) A spinal decompression apparatus comprising:
a support frame including a first body supporting portion and a second body supporting portion, the first body supporting portion moveable relative to the second body supporting portion along a longitudinal axis;

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a first actuator adapted to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis to provide spinal decompression;

a securing system adapted to secure a patient to the first and second body supporting portions; and

a linkage mechanism adapted to move the first body supporting portion along a path relative to the second body portion, the path comprising at least one rotational degree of freedom,

wherein the first actuator is adapted to move the first body supporting portion along the longitudinal axis without interfering with movement of the first body supporting portion along the path comprising at least one rotational degree of freedom.

57. (New) A method of performing spinal decompression on a patient comprising the steps of:

providing a therapeutic apparatus having a support frame with a first body supporting portion, a second body supporting portion, and a first actuator adapted to move the first body supporting portion relative to the second body supporting portion along a longitudinal axis;

supporting the patient along the first body supporting portion and the second body supporting portion;

securing the patient to the apparatus with a securing system;

moving the first body supporting portion along a path relative to the second body supporting portion, the path comprising at least one rotational degree of freedom; and

activating the actuator to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis to affect the distance between the first body supporting portion and the second body supporting portion to provide spinal decompression, without interfering with the step of moving the first body supporting portion along the path comprising at least one rotational degree of freedom.

58. (New) A therapeutic apparatus for a patient comprising:

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a support frame including a first body supporting portion and a second body supporting portion, the first body supporting portion moveable relative to the second body supporting portion along a longitudinal axis;

first means for moving the first body supporting portion relative to the second body supporting portion along the longitudinal axis;

securing means for securing a patient to the first and second body supporting portions; and

linkage means for moving the first body supporting portion along a path relative to the second body portion, the path comprising at least one rotational degree of freedom, wherein the first means is adapted to move the first body supporting portion along the longitudinal axis without interfering with movement of the first body supporting portion along the path comprising at least one rotational degree of freedom.

59. (New) A therapeutic apparatus for a patient comprising:

a support frame including a first body supporting portion and a second body supporting portion, the first body supporting portion moveable relative to the second body supporting portion along a longitudinal axis;

first means adapted to move the first body supporting portion relative to the second body supporting portion along the longitudinal axis;

securing means adapted to secure a patient to the first and second body supporting portions;

linking means adapted to move the first body supporting portion along a path relative to the second body supporting portion, the path comprising at least one rotational degree of freedom; and

processor means adapted store at least one pre-programmed traction protocol.